

Question	Answer
1.	$\overline{AE} \perp \overline{AB}$
2.	Possible answer: \overline{AB} and \overline{FG} are skew.
3.	$\overline{AE} \parallel \overline{FB}$
4.	plane $AEF \parallel$ plane DHG
5.	Possible answer: $\angle 3$ and $\angle 5$
6.	Possible answer: $\angle 1$ and $\angle 7$
7.	Possible answer: $\angle 2$ and $\angle 8$
8.	Possible answer: $\angle 4$ and $\angle 5$
9.	135°
10.	23°
11.	122°
12.	$m\angle 8 = 59^\circ$ and $m\angle 6 = 59^\circ$, so $\angle 8 \cong \angle 6$. $a \parallel b$ by the Conv. of Corr. \angle Post.
13.	$a \parallel b$ by the Conv. of Alt. Ext. \angle Thm.
14.	$\angle 8$ and $\angle 7$ are supp., so $a \parallel b$ by the Conv. of the Same-Side Int. \angle Thm.
15.	$\angle 8 \cong \angle 4$, so $a \parallel b$ by the Conv. of the Alt. int. \angle Thm.

Question	Answer
16.	$m\angle 1 = 3(14) + 12 = 54^\circ$, and $m\angle 2 = 4(14) - 2 = 54^\circ$, So $\angle 1 \cong \angle 2$. The guy wires are \parallel by the Conv. of the Corr. \angle Post.
17.	1. $\angle 1 \cong \angle 2$, $\ell \perp n$ (Given) 2. $p \parallel n$ (Conv. of Alt. Int. \angle Thm.) 3. $\ell \perp p$ (\perp Transv. Thm.)